

Implement a program using basic programming constructs like Branching and Looping

1} while loop

```
class Whileloop
{
    public static void main(String arg[])
    {
        int a=0;
        while(a<=100)
        {
            if(a%20==0)
            {
                System.out.println(a);
            } a++;
        }
    }
}
```

Output :

0

20

40

60

80

100

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java Whileloop.java
0
20
40
60
80
100

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```

2} for loop

```
class Forloop
{
    public static void main(String arg[])
    {
        int a;
        for(a=0;a<=100;a++)
        {
            
```

```
if(a%20==0)
{
    System.out.println(a);
}

}
```

Output :

```
0
20
40
60
80
100
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java Whileloop.java
0
20
10
50
30
100

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```

3} dowhile loop

```
class Dowhileloop

{
    public static void main(String arg[])
    {
        int a=0;
        do
        {
            if(a%20==0)
            {
                System.out.println(a);
            } a++;
        }
    }
}
```

```
    } while(a<=100);

}
```

Output :

```
0
20
40
60
80
100
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java Whileloop.java
0
20
40
60
80
100

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```

4}if else

```
public class IfElseExample {
    public static void main(String[] args) {
```

```
int number=13;

    if(number%2==0){

        System.out.println("even number");

    }else{

        System.out.println("odd number");

    }

}
```

Output:

odd number

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java IfElseExample.java
odd number

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>D_
```

5} Ladder if else

```
class SecJavaProgram

{

    public static void main(String args[])
{
```

```
{  
int a=90;  
  
if(a>=90)  
{  
    System.out.println("grade A");  
}  
else if(a>=80)  
{  
    System.out.println("grade B");  
}  
else if(a>=70)  
{  
    System.out.println("grade c");  
}  
else if(a<70)  
{  
    System.out.println("grade F");  
}
```

```
}
```

```
}
```

Output :

grade A

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java SecJavaProgram.java
grade A

C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```

6} nested if else

```
public class PositiveNegativeExample {
    public static void main(String[] args) {
        int number=-13;
        if(number>0){
            System.out.println("POSITIVE");
        }else if(number<0){
            System.out.println("NEGATIVE");
        }else{
            System.out.println("ZERO");
        }
    }
}
```

```
    }  
}  
}
```

Output :

NEGATIVE

```
C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java PositiveNegativeExample.java  
NEGATIVE  
C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```

7} switch

```
class SecJavaProgram  
{  
    public static void main(String args[])  
    {  
        int a=6;  
        switch(a)  
        {  
            case 1:  
                System.out.println("monday");  
                break;  
            case 2:
```

```
System.out.println("tuesday");
break;
case 3:
System.out.println("wednesday");
break;
case 4:
System.out.println("thursday");
break;
case 5:
System.out.println("friday");
break;
case 6:
System.out.println("saturday");
break;
case 7:
System.out.println("sunday");
break;
default:
System.out.println("invalid");
```

```
break;
```

```
}
```

```
}
```

```
}
```

Output:

Saturday

```
C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>java SecJavaProgram.java
saturday
```

```
C:\Users\hp\OneDrive\Desktop\Dhruv Gharat>
```